Wisconsin Urban & Community Forests
A Quarterly Newsletter of the Wisconsin Department of Natural Resources, Forestry Division

Wisconsin DNR Introduces Community EAB Toolkit

by Urban Forestry Working Group
DNR Division of Forestry

The Wisconsin Department of Natural Resources, Urban Forestry Program, introduced the *Emerald Ash Borer Toolkit for Wisconsin Communities* at the annual conference in Green Bay. The toolkit is a resource for local governments to prepare for and respond to the anticipated arrival of EAB. It is a collaborative effort by Wisconsin DNR, Wisconsin Department of Agriculture Trade & Consumer Protection, UW–Extension and USDA Forest Service. Input from other states, community foresters, arborists and municipal staff helped guide its development. The toolkit is designed for maximum flexibility to accommodate the needs of various users. Additions and updates are anticipated as the emerald ash borer situation changes.

The toolkit features:

- **Readiness Planning**—checklist of planning steps; components of a written readiness plan; forming a readiness/response team
- **Command Structure**—multi-agency roles and procedures upon finding EAB
- **Public Awareness Tools**—PowerPoint presentations, DVDs, brochures, sample press releases
- **Detection and Assessment**—EAB survey/sampling protocol; conducting a municipal tree inventory
- **Estimating Costs**—calculating your municipality's removal/replacement costs
- **Control Options**—current and potential methods for controlling EAB
- **Funding**—potential funding mechanisms; garnering financial support for forestry programs
- **Wood Waste**—marshalling yards (storage sites for infested trees); ash utilization and marketing
- **Ordinances**—sample language for handling ash trees on private property

Photo by Jeff Roe, WDNR

Don Kissinger, regional urban forestry coordinator, introduces the Emerald Ash Borer Toolkit for Wisconsin Communities.

How to get a toolkit

The toolkit comes in three formats: a 3-ring binder, a CD and as files downloadable from the Web page at http://dnr.wi.gov/forestry/uf/eab/.

- **3-Ring Binder**

  There are limited copies of the binder. These are reserved—one for each Wisconsin community and one for each urban forestry consulting company that provides services to Wisconsin communities. *Please contact your regional urban forestry coordinator* to request a copy.

- **CD & Download**

  The toolkit CD contains everything in the binder except for a few items that are only available in hard copy (the magnetic bumper sticker, for example). Where to order the non-electronic materials is included on the CD. Visit the Web page to order a CD or for a direct download. CDs will be mailed as supplies allow.

Updates to the EAB Toolkit

As toolkit materials are added or revised, DNR will post update packages for downloading. These will include a revised table of contents noting where the new files go and what documents the revised files replace. Check back periodically for these updates.

More Information

For more information on emerald ash borer, go to http://emeraldashborer.wi.gov. For more information on Wisconsin DNR's urban forestry program go to http://dnr.wi.gov/org/land/forestry/UF/.

WISCONSIN DEPT. OF NATURAL RESOURCES

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Community Profile:

Village of Amherst

by the Amherst Tree Board

Community Profile

Tree City USA: 9 years

Growth Awards: 6

Population: 1039

Number of Street Trees: Approximately 800

Trees on Village Property: Aproximately 1350

Miles of Street: 6.2

Number of Parks: 11

Awards: 2001 Landscape Beautification Award & WAA Gold Leaf Award

Program Profile:

DNR Urban Forestry Grants: 6 totaling $20,500

Village Tree Board: Linda Sook, President, plus 4 members

Staff: Village Forester Mike Hinrichs, Director of Public Works; 2 public works employees

Equipment: Power pole saw, chain saw and hand tools

Nursery: contains 300 trees

Budget: $9,250

The village of Amherst is located midway between Stevens Point and Waupaca on US Highway 10. It has long been known as a community of artists, musicians, farmers and business people. With this diversity, Amherst appeals to many people, yet it has kept the small-town atmosphere and friendliness. Recreationally, there is fishing and canoeing on the Mill Pond and Tomorrow River—a designated Class I trout stream. Nearby are snowmobile trails and the Tomorrow River Trail, providing opportunity for walking, biking and horseback riding.

Settlement began around 1850. In 1853 the town was named in honor of General Amherst, of revolutionary fame. A mill was built on the Tomorrow River in 1853; the first school was built in 1855. The Portage County Fair was established in 1872 and continues to be a favorite of Portage County residents to this day. A vote in 1900—78 in favor, 5 against—led to the incorporation of the 640-acre village. The village now covers 766 acres. Amherst has a long commitment to green spaces and village parks. A village ordinance book dated 1941 has provisions to provide shade trees and penalties for destruction of trees and shrubs. In 1941 three parks were listed in the village, now there are eleven.

The tree board of the Village of Amherst has a rather unique history. In the fall of 1996, an unexpected removal of 80-plus-year-old maple trees for storm sewer installation led to an overflow crowd of protesting citizens at a village board meeting. This dramatic show of concern for trees resulted in a request to the village board to form a new group to oversee the village tree population. Prior to this there was only a part-time village forester whose only responsibility was to survey for Dutch elm disease. A group of volunteers began informal meetings and in May of 1997 the village board appointed a formal committee for the volunteers to continue their work. At this time, meeting notices were posted, officers elected and minutes of meetings officially recorded. This committee defined their purpose and after a great deal of study, established a tree ordinance. The group worked collaboratively, discussing ideas with Don Kissinger, DNR North Central Region Urban Forestry Coordinator, the village public works department and committee, village attorney, village forester, and village board. On October 28, 1997, after a public hearing, the village board approved the tree ordinance and a formal tree board was established. Over the past nine-and-a-half years, the Amherst village board has come to value the tree board and has always supported their decisions in overseeing the community forestry program. The amount of funding requested by the tree board each year has been granted, with the budget increasing almost five-fold, from $2000 in 1997 to $9250 in 2006.

The accomplishments of Amherst's tree board are many, and reflect the dedication and hours of volunteer time given by its members. The tree board has been successful in enlisting community volunteers to assist with various projects; in addition, it has been able to fund projects through effective grant writing. A total of $14,972 in Urban Forestry Grants and $8500 in Wisconsin Power & Light/Alliant Grants have been administered. Amherst has attained the Tree City USA Award all nine years of the tree board's existence, as well as six Growth Awards. Other projects have included a concerted effort to plant street trees in new subdivisions and along village streets, rescue

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Send your inquiries, address changes, or story ideas to Dick Rideout, Richard.Rideout@Wisconsin.gov (608-267-0843) or Laura Wyatt, Laura.Wyatt@Wisconsin.gov (608-267-0568).

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Articles, news items, photos and ideas are welcome.

This newsletter is available in alternative format upon request and can also be downloaded in PDF format from our Web site: http://dnr.wi.gov/org/land/forestry/UF/

For breaking UF news, anecdotes, announcements and networking opportunities, sign up for The Urban Forestry Insider, DNR's twice-monthly e-newsletter. Archives are at http://dnr.wi.gov/org/land/forestry/UF/resources/InsiderArchive.html

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Emerald Ash Borer Management Options

by Dr. R. Chris Williamson
Dept. of Entomology, University of Wisconsin–Madison

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To date, emerald ash borer has not been found in Wisconsin! Despite this fact, many Wisconsinites, including arborists, landscapers, nursery growers and homeowners, are anxious and eager to learn the optimal or most effective management strategy of this highly destructive insect. Researchers at Michigan State University, The Ohio State University and the US Department of Agriculture continue to study methods of controlling EAB. The latest information on insecticide evaluations can help arborists, landscapers and homeowners decide if and how they can treat trees for EAB. However, there are still many unanswered questions concerning the prevention or control of EAB, including the uncertainty of the long-term effectiveness of insecticides. This article addresses the current recommended EAB management options.

Recommended Management Options

A concerted effort to stop EAB has been launched by several state and federal agencies.

Eradication efforts by state and federal agencies in Michigan, Ohio, Indiana, Illinois and Canada are designed to prevent small (low population) infestations from growing into large infestations. Eradication includes the removal and destruction of all ash trees within a ½-mile radius of a confirmed EAB infestation, based on the current recommendation of the National EAB Science Panel.

Quarantines are in place to prevent interstate movement of regulated articles that originate within the quarantine area. Regulated articles include ash nursery stock and green lumber; any other ash material—including logs, stumps, roots or branches—as well as composted and un-composted wood chips. Due to the difficulty in distinguishing between species of hardwood firewood, all hardwood firewood—including ash, oak, maple and hickory—are regulated articles. The USDA Animal and Plant Health Inspection Service recently expanded the EAB quarantine to include the entire states of Illinois, Indiana and Ohio. The objective is to prevent the spread of EAB while the science community continues to work to develop solutions to combat EAB, including improved detection and control strategies.

Chemical Treatment research is being conducted at universities to evaluate the effectiveness of various treatments for EAB control. Research results suggest that some insecticide treatments are effective, however it is important to consider the following when making a decision to use insecticides:

- Using insecticides preventatively to control EAB on ash trees is an option within an EAB quarantine area but only recommended within 10–12 miles from a confirmed EAB infestation. If your ash trees are located outside of this area, using insecticides is not recommended.
- If your tree is located within an area designated for eradication, it may be removed by regulatory agencies even if it has been treated.
- Insecticide treatments are more effective on smaller trees, with a trunk diameter of less than 10 inches.
- If numerous untreated, infested ash trees are nearby, insecticides and other controls are less likely to protect trees due to the pressure of a large population of EAB beetles.
- Once trees become infested, insecticides will be less effective even if trees are showing few EAB symptoms.
- It is still unclear if insecticides are enhancing tree survival or just delaying tree death.
- When using any pesticide, ALWAYS read and follow label directions. It's the law!

Professional Insecticide Treatments

- Soil injections or drenches of imidacloprid (Merit) applied in a grid pattern around the base of the trunk (<2 feet from the trunk) on an annual basis may protect ash trees from EAB.
- Trunk injections of imidacloprid (Imicide, IMA-jet, Pointer) and bidrin (Injecticide-B) may provide control of EAB.
- Foliar and bark spray applications of bifenthrin (Onyx), cyfluthrin (Tempo), permethrin (Astro), or carbaryl (Sevin) in late May and June may control visiting adult EAB and hatching larvae.

Homeowner (do-it-yourself) Insecticide Treatments

- Soil drenches and injections of imidacloprid (Bayer Advanced Garden Tree and Shrub Insect Control) may provide effective control of EAB.
- Soil treatments are best when applied in a grid pattern to the base of the trunk (<2 feet from the trunk).
- Trunk injections of acephate (ACECAP 97 Systemic Insecticide Tree Implants and Bonide Systemic Insecticide Bullets) in ash trees >3 inches trunk diameter may provide control of EAB.
- Due to the potential of insecticide drift and the specialized equipment needed for application to large trees, bark and foliar applications are best left to arborists and professional horticulturists who are licensed pesticide applicators and have the necessary equipment.

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Photo by Village of Amherst

Master Gardener volunteers take a break from watering and weeding a portion of the 300 plants within the village nursery.

Community Profile: Amherst

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trees that were scheduled to be bulldozed during county highway construction and replacing damaged or diseased trees on village property. The tree board is now addressing the issues of new development and is considering ordinances to protect existing trees, establish green spaces and requesting developers to plant street trees.

The most ambitious projects undertaken by the tree board include the village tree nursery and the Tomorrow River project. The tree board, in cooperation with an aspiring Eagle Scout, developed a plan for the nursery on an acre of village land. The initial phase of planning, site preparation tree installation and irrigation system set-up involved over 140 hours of work. The 1999 Amherst Arbor Day celebration was held at the new nursery site. The tree board continues to oversee the nursery, providing for maintenance (watering, mowing, mulching and weeding) and planning for transplanting trees along the streets and other areas.

Village Forester Mike Hinrichs inspired the Tomorrow River project. The scenic Tomorrow River has long been a highlight of Amherst. Over the years trees had fallen into the river, the banks were eroding and the view was cluttered with boxelder, all of which diminished the recreational usage of the river. The culmination of this two-year project in 2005 resulted in erosion control by stabilizing the riverbanks and removing obstacles in the river. Beautification includes a walking trail and plantings of trees and wildflowers along part of the Tomorrow River that meanders through Amherst.

Because the tree board doesn't just plan projects but carries them out, it soon became evident that extra hands were needed. A board member learned of a corrections program, ATTIC, which provided supervision and transportation to local communities for persons required to perform community service. Over three summers, this amounted to approximately 840 hours of labor, spent primarily in the tree nursery and on the river project. This was a very positive experience for everyone involved—the village gained needed assistance on projects and the crews benefited by learning the importance of teamwork, respecting the environment and satisfaction of a job well done. Unfortunately, due to budget issues, the program was not available for 2006 and its future availability remains questionable. Other options for needed assistance are being explored.

Hinrichs plays an important role in the urban forestry program. Through successful collaboration with the village public works department, he gains assistance in accomplishing projects and meeting needs on a timely basis. He is actively involved in the North Central Wisconsin municipal foresters networking group and has taken part in their roundtable discussions and tours. He receives continuing training through courses and workshops offered by the Wisconsin Arborist Association and DNR. He then shares relevant information with the tree board and public works department.

Amherst's annual Arbor Day celebration has evolved into a valuable activity for the community. Planning for the April event begins in January by contact with the Amherst elementary school. Fifth-grade teachers and students are actively involved in the program each year, and the high school FHA provides tree-shaped cookies. In 2005, the tree board combined the Arbor Day celebration with a request of the local fire department for a donation of trees from the village nursery, as the fire station budget did not allow for purchase of trees. Each year the tree board looks for ways to creatively celebrate Arbor Day with the fifth-grade students.

In the past nine-and-a-half years, with the establishment of the village tree board, Amherst's commitment to maintaining green space and a healthy tree population have been formalized and the urban forestry program given its proper place in the village administration. Important issues such as diseases, street trees in new developments, and protecting existing trees will continue to be addressed.

Invasive Species Awareness Month—Focus on Forests

by Rachel Orwan
ISAM Coordinator, Wisconsin Council on Invasive Species

Call to Action: Governor Doyle has declared June Invasive Species Awareness Month (ISAM) and has recognized this as an opportunity for all of us to join forces and "take action against the introduction and spread of invasive species." June may seem a long way off, but now is the time to start thinking about how you and your organization can encourage positive change in Wisconsin's natural and managed landscapes.

Forest Focus for 2007: Did you know that we are focusing on species that invade forests this year? That's right, it's our goal to educate landowners, forest workers, tree care professionals and Joe Q. Public about the threat invasive species pose to Wisconsin's forests.

But we need your help! As urban forestry professionals and advocates, you provide a vital link to those living in cities and towns across the state. Local community parks may be the only exposure many of these folks have to forested environments. Parks provide a refuge—a place to relax and forget about the worries of daily life—and they are under siege from invasive plants and animals. There's garlic mustard, gypsy moths, honeysuckle, buckthorn, exotic earthworms, and let's not forget the emerald ash borer and others poised to attack our woodlands. Because community parks are near population centers, they face a constant influx of invasives. People unknowingly allow seeds and insects to hitchhike in on backpacks, sneakers, clothing, dogs, bike and car tires, and infested firewood.

We have the opportunity this June to reach out to city dwellers and encourage them to steward the land. As ISAM coordinator for 2007, I'd like to invite each of you to hold an event during June aimed not only at educating and raising awareness of invasive species, but also aimed at giving people the knowledge they need to prevent and manage invasive species incursions throughout the state.

You can help by giving presentations to local groups like garden clubs, tree care professionals, outdoor groups and Scout troops. Combine talks about invasive species with more fun activities such as hikes, bike rides, canoe floats and garden tours. Illustrate the devastation emerald ash borer could cause a forest by flagging all of the ash trees in a stand. While you're there, fill some garbage bags with garlic mustard and show people how they can be part of the solution by participating in a group pull. Newspaper articles and informational posters count as well. The sky's the limit!

Don't know where to start? Visit the Wisconsin Council on Invasive Species Web site, **http://invasivespecies.wi.gov**, for ISAM information, including lists of events that work, links to existing PowerPoint shows you can use, lists of experts and speakers throughout the state, tips on publicizing and executing events as well as promotional postcards and posters. Remember to register your event for the on-line events calendar once you have all the details worked out. Feel free to contact me, Rachel Orwan, **isam_wi@yahoo.com**, if you have any questions, comments or concerns.

EAB Management Options

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Insecticide Treatment Considerations

- Soil injections and drenches require 1–2 months to move throughout the tree. Smaller trees (<10-inch trunk diameter) should be treated in April or May while larger trees (>10-inch trunk diameter) may need to be treated the preceding fall to ensure uptake.
- Trunk injections typically take about 2 weeks to move throughout the tree.
- Repeated trunk injections may cause long-term damage.
- Bark sprays must be applied before EAB egg hatch (June–July) to prevent larvae from burrowing (chewing) through the bark into the tree.
- Foliar sprays should be applied during EAB adult activity (late May–August).

Because EAB has NOT been discovered in Wisconsin, using insecticides is NOT recommended. For the latest information regarding the regulatory status of EAB in your area, please visit the Wisconsin Department of Agriculture, Trade and Consumer Protection's Web site, **www.datcp.state.wi.us/arm/environment/insects/emerald-ashborer/index.jsp**, or contact your University of Wisconsin–Extension county office.

References to pesticide products in this publication are for your convenience and are not an endorsement of one product over other similar products. You are responsible for using pesticides according to the manufacturer's current label directions.

Many questions exist regarding optimal EAB management, including the uncertainty of the long-term effectiveness of insecticides as well as the wide range (inconsistent) results of insecticide treatments for control of EAB. Consequently, potential EAB management strategies continue to remain somewhat fluid until more research is completed and additional information is generated.

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Community Tree Profile:

Cucumbertree Magnolia (Magnolia acuminata)

by Laura G. Jull
Dept. of Horticulture, University of Wisconsin–Madison

Photo by Edward Hasselkus, Professor Emeritus, UW–Madison

Cucumbertree magnolia blossom

Native To: Eastern and southeastern US, particularly in the mountains; considered an endangered species in southern Ontario, Canada, near the north shore of Lake Erie

Mature Height: 50–70'

Spread: 40–50'

Form: Pyramidal when young, with prominent, straight, central leader; becomes rounded with age; lower branches sweep downward and turn up at branch tips; coarse texture.

Growth Rate: Moderate to fast

Foliage: Alternate, simple, dark green, elliptic to oblong-ovate with entire margins; cordate to rounded leaf base; 4–8" long, widest in the middle; short, acuminate tip; short petiole; silvery and slightly pubescent underneath leaves.

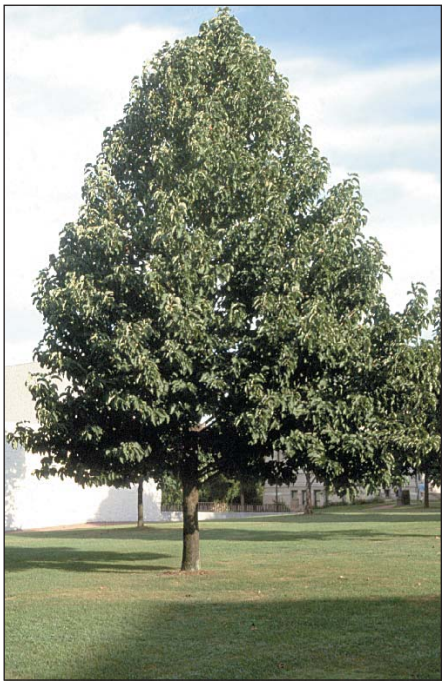

Photo by Edward Hasselkus, Professor Emeritus, UW–Madison

Cucumbertree magnolia

Buds and Stems: Alternate, silvery green, silky and pubescent, ½–1" long; lateral buds are appressed against stem; twigs are smooth, brown to reddish brown, becoming gray, with U-shaped leaf scars; also has transverse, stipular scar at nodes that goes around the stem; slight lemony or spicy smell when twigs scratched; solid, white pith.

Fall Color: Yellow to brown; fair but can be good in some years

Flowers: Solitary flowers occur with the leaves, hence are not real showy; each flower is cup-shaped with six tepals (modified sepals or petals), 2½–3" long, greenish yellow, slightly fragrant, borne high up in the tree and are hidden by the foliage; flowers occur in early June.

Fruit: Aggregate of follicles (multiple fruit structure); resembles a small cucumber; green, turning bright pinkish red, 2–3" long, twisted and knobby. Fruit matures in late summer, splits open revealing aromatic, bright reddish orange seeds that dangle by a thread. Fruit falls to the ground in autumn and creates moderate litter.

Bark: Gray-brown becoming ridged and furrowed with flat, narrow, gray ridges and vertical fissures; young bark is silvery gray, smooth, and easily damaged by mechanical injury.

Site Requirements: Full sun; prefers a deep, loamy, organic soil; pH adaptable; moist, well-drained soil. Intolerant to dry, compacted, poorly drained, heavy clay soils, drought and road salt. Difficult to transplant, plant in spring only; not invasive.

Hardiness Zone: 4a; one of the hardiest of the magnolias

Insect & Disease Problems: Usually no serious insect problems but can get scale and verticillium wilt.

Suggested Applications: Cucumbertree magnolia is a nice specimen or shade tree for lawns and parks. It is not suited for use as a street tree due to intolerance to drought and poor soils.

Limitations: All magnolias are susceptible to verticillium wilt. Difficult to transplant due to its fleshy root system, hence, best to dig and plant in spring. Usually pest free, but intolerant to urban conditions.

Comments: Cucumbertree magnolia's attractive form, branch pattern and clean foliage make this tree a good choice for large areas, parks and golf courses. Fruit on cucumbertree magnolia is showy and bright pink. Cucumbertree magnolia is one of the parents to many of the wonderful, hybrid yellow magnolias (see below for cultivars). It is used in breeding due to its unique form for a magnolia, flower color, later bloom time and increased cold hardiness.

Common Cultivars or Selections:

var. *subcordata*: yellow cucumbertree; large shrub to small, bushy tree, 20–30' tall. Smaller leaves with matted hairs on the undersides of the leaves, pubescent stems. Smaller flowers occur with the leaves, but flowers are bright yellow and tulip shaped. Not

commonly available but used in breeding the hybrid yellow magnolias. Cold hardy to zone 5b.

'Miss Honeybee': larger, bright yellow flowers open earlier in season

Yellow hybrid magnolias (commercially available):

'Butterflies': upright, pyramidal form, 20' tall and wide; flowers before leaves appear, deeper yellow flowers; one of the best yellow magnolias (hybrid of *M. acuminata* × *M. denudata* 'Sawada's Cream)

'Elizabeth': pyramidal, upright form, 25–30' tall, 15–20' wide; flowers before leaves appear, creamy yellow, slightly fragrant flowers; vigorous grower (hybrid of *M. acuminata* × *M. denudata*)

'Gold Finch': upright form, 20' tall and wide; flowers before leaves appear, light butter-yellow flowers, prolific bloomer; one of the hardiest yellow magnolias (*M. acuminata* var. *subcordata* 'Miss Honeybee' × *M. denudata* 'Sawada's Cream')

'Gold Star': upright form, 12–15' tall, 15–20' wide; cream-ivory to yellow, star-like flowers; new leaves are bronze (*M. acuminata* var. *subcordata* 'Miss Honeybee' × *M. stellata* 'Rubra')

'Ivory Chalice': upright form, 20–25' tall, 20' wide; ivory, slightly fragrant, narrow, chalice-shaped flowers (hybrid of *M. acuminata* × *M. denudata*)

'Limelight': upright oval form, 20' tall and wide; light green to creamy yellow flowers (hybrid of *M. acuminata* var. *subcordata* × *M.* × *soulangiana* 'Alexandrina')

'Yellow Bird': rounded form, 30–35' tall, 35' wide; small, tulip-shaped, yellow flowers as the leaves are emerging (hybrid of *M. acuminata* va r. *subcordata* × *M.* × *brooklynensis* 'Evamaria')

'Yellow Fever': upright form, 20–25' tall, 20' wide; ivory-yellow flowers with lime-green highlights, tinged light pink at the base of each tepal (hybrid of *M. acuminata* × *M.* × *soulangiana*)

'Yellow Lantern': upright form, 20–25' tall, 20' wide; large, slightly fragrant, soft yellow flowers (hybrid of *M. acuminata* var. *subcordata* 'Miss Honeybee' × *M.* × *soulangiana* 'Alexandrina')

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What Damaged This Tree?

Photo by Mark Drow, Arborist

Turn to page 15 to find out…

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Avoid Pruning Oaks in Urban Settings April through July

by Kyoko Scanlon, Plant Pest & Disease Specialist
DNR Division of Forestry

Pruning recommendations for oak trees in urban or community settings have changed! The Wisconsin Department of Natural Resources advises against pruning oak April through July (April, May, June and July) in urban settings. This is particularly important in order to protect oak trees from being infected with oak wilt.

Oak wilt is a serious disease of oak, caused by the fungus, *Ceratocystis fagacearum*. The fungus attacks water and nutrient conducting channels in the trees and induces the plugging of these channels. Leaves of infected trees wilt and fall prematurely, and the trees will die. Every year, thousands of oak trees in forests, woodlots and urban settings are killed by this disease. Oak wilt is most common in the southern two-thirds of Wisconsin.

Oak wilt spreads from diseased to healthy trees by insect vectors and through connected root system. Fungal mats are formed under the bark of a tree that was killed by oak wilt within a year after the tree died, commonly in the spring. Small sap beetles (Coleoptera: *Nitidulidae*) are attracted to the sweet odor emitted from the mats. The disease is transmitted when the beetles that are contaminated with oak wilt spores later fly to a fresh wound of a healthy tree. The beetle that transmits oak wilt disease is not capable of creating a wound by itself. Thus, it is very important to avoid pruning or injuring oak trees during high-risk periods.

You may remember the high-risk period was previously designated as April 15 to July 1. Recently it was decided that this non-pruning period would be expanded and include only months, not specific dates. The change reflects recent temperature trends observed in Wisconsin and results from new research studies about oak wilt. For example, a 10-year average of April maximum daily temperature was the highest during the most recent 10-year period (1997–2006) in all of the six major weather stations (Green Bay, La Crosse, Madison, Milwaukee, Rhinelander, Wausau) throughout the state, compared to those of previous decades (1967–1976, 1977–1986, 1987–1996). Recent research studies conducted in Minnesota provided new information about the seasonal flight dynamics of the two principal vectors of oak wilt, the beetles *Colopterus truncatus* and *Carpophilus sayi*.

The dates were reviewed as part of the process to develop new statewide guidelines for timber harvest activities in oak stands in Wisconsin. The new oak harvest guidelines specify April 15 to July 15 as high-risk periods for areas north of the Tension Zone and April 1 to July 15 for areas south of the Tension Zone. The Tension Zone is an area which runs across the middle of the state from northwest to southeast, and signifies the major climate difference between northern and southern forests. The two forest types overlap in this zone, see http://wisplants.uwsp.edu/ZONESsm.gif. Although guidelines that separate the state into two categories can be useful in the forest setting, having two sets of dates may be confusing to the general public. You already have many numbers to remember in everyday life, including your home and work phone numbers, your social security number, a pass code for ATM, and so on. Thus, the new message for oak non-pruning periods in the urban setting includes just one time period and specifies only months, no dates. It is scientifically sound and hopefully easy to remember.

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Coming Events

April 16–18, 2007—*Trees & Utilities National Conference*, Tuscany Suites & Casino, Las Vegas, NV. Contact National Arbor Day Foundation, 402-474-5655, conferences@arborday.org, or www.arborday.org/programs/conferences/communityforestry/.

April 22–25, 2007—*National Association of Environmental Professionals Annual Conference*, Holiday Inn International Drive Resort, Orlando, FL. Contact www.naep.org/displayconvspecific.cfm?convnbr=2679.

April 30–May 3, 2007—*i-Tree Train-the-Trainer Academy*, Blacksburg, VA. Contact www.arborday.org/itree/.

May 14–16, 2007—*New Strategies for Urban Natural Resources: Integrating Wildlife, Fisheries, Forestry, and Planning*, Chicago, IL. Contact www.informalearning.com/Wildlife.

May 16–19, 2007—*10th European Forum on Urban Forestry: New Forests after Old Industries*, Gelsenkirchen, Germany. Contact www.industriewald-ruhrgebiet.nrw.de/efuf2007/index.htm.

May 21–22, 2007—*Storms Over the Urban Forest National Conference*, Atlanta, GA. Contact National Arbor Day Foundation, 402-474-5655, conferences@arborday.org, or www.arborday.org/shopping/conferences/conferencelist.cfm.

Urban Forest Insect Pests:

Pigeon Tremex

by Linda Williams, Forest Health Specialist
DNR Northeast Region

Sometimes called pigeon horntail or woodwasp, the pigeon tremex (*Tremex columba*) is a native insect that attacks stressed and dying hardwoods. In Wisconsin their preferred host is maple, but they will also infest hickory, elm, beech and other deciduous trees. Adult horntails are large, up to 1½ inches long. The female uses her long, stout ovipositor to penetrate the bark and deposit an egg in the wood of the tree. Along with her egg she deposits fungal spores of the canker rot fungus *Cerrina unicolor*. This fungus grows into the wood and rots the wood where the larvae will feed. Without the canker rot fungus, the eggs will hatch but the larvae cannot feed in the solid wood. The fungus decays the wood so the larvae can eat it. Larvae take two years to complete development within the tree. Mature larvae are up to two inches long and are approximately as thick as a pencil. Larval galleries can be six feet long. When the larvae have completed their feeding they pupate, eventually emerging as adults which chew their way out of the tree and continue the lifecycle.

Photo by Linda Williams, WDNR

Adult Pigeon Tremex

Since pigeon tremex prefer dead, dying or highly stressed trees, they are not usually considered a pest. Occasionally adults will emerge from firewood that is brought into the house but structural wood within your house is not suitable host material, so their presence in your house is merely an annoyance. Some people may mistake the projections at the end of the abdomen ("horntails") for a stinger, but this insect is not capable of stinging. Adults often die with their ovipositors still stuck in the tree. If you find these dead adults still attached to your tree it should be a signal that your tree is in decline.

June 6, 2007—*Wisconsin Urban Forestry Council quarterly meeting*, Madison, WI. Contact Laura Wyatt, 608-267-0568 or Laura.Wyatt@Wisconsin.gov.

June 18–20, 2007—*Urban Wildlife Management National Conference*, World Forestry Center, Portland, OR. Contact National Arbor Day Foundation, 402-474-5655, conferences@arborday.org, or www.arborday.org/programs/conferences/communityforestry/.

July 28–August 1, 2007—*International Society of Arboriculture Annual Conference & Trade Show,* Honolulu, HI. Contact ISA, www.isa-arbor.com/conference/.

September 12, 2007—*Wisconsin Urban Forestry Council quarterly meeting*, Madison, WI. Contact Laura Wyatt, 608-267-0568 or Laura.Wyatt@Wisconsin.gov.

September 15–19, 2007—*Society of Municipal Arborists Annual Conference*, Hollywood Beach Marriott Resort & Spa, Hollywood, FL. Contact www.urban-forestry.com.

November 8–10, 2007—*TCI Expo*, Connecticut Convention Center, Hartford, CT. Contact Tree Care Industry Association, www.natlarb.com/.

December 5, 2007—*Wisconsin Urban Forestry Council quarterly meeting*, Madison, WI. Contact Laura Wyatt, 608-267-0568 or Laura.Wyatt@Wisconsin.gov.

If there is a meeting, conference, workshop or other event you would like listed here, please contact Dick Rideout at 608-267-0843 with the information.

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Urban Tree Health Matters:

Black Knot of Prunus

by Kyoko Scanlon
Forest Pathologist, DNR Division of Forestry

Photo by Kyoko Scanlon, WDNR

An elongated black knot gall.

Have you seen a black gall that looks like a charred marshmallow on a twig or branch of cherry trees? These trees were not burned, but infected with the fungus, *Apiosporina morbosa*. The fungus is native to North America and causes black, corky swelling, primarily on twigs and branches, but also on main stems of many *Prunus* species. The black knot disease is commonly seen on wild and cultivated cherries, chokecherries and plums.

Symptoms start with a greenish slight swelling on affected areas. During the second year, swelling enlarges and becomes black and hard, creating a tumor-like structure. Fungi other than *A. morbosa* may grow on older knots and make them look whitish or pinkish. Severe infections girdle branches and trunks, cause branch dieback and can lead to tree mortality. In fact, the fungus has been tested as a biological control of unwanted young pin cherry on large clearcut and burned forests in eastern Canada by placing infected trees in regeneration plots.

The fungus overwinters in knots and infected wood adjacent to knots. Spores are released in spring and early summer during wet weather. Very few spores are produced when temperatures are near freezing or above 88°F, with heavy spore dispersal at 55–80°F. Spores are carried by wind or rain splash and infect mainly young shoots and occasionally branch and stem wounds. Although infection occurs earlier in the season, swelling symptoms do not develop until late summer, fall or the following spring. The time between infection and symptom development varies among species and different cultivars of *Prunus*. One study found that only 11 percent exhibited knots the same year of infection on one cultivar of European plum, 'Bluefre', whereas 76 percent developed knots on another cultivar, 'Veeblue'. The fungus continues to expand in infected wood and creates an elongated knot over the years until a twig or branch is girdled and killed.

Since spores are produced from black knots, removal of galls in winter, before the new growth starts, is effective to control this disease. Prune branches at least six to eight inches below each swelling. This is necessary because the fungus is spread beyond the edge of swelling. Pruned branches should be destroyed by burning or burying. Pruned branches with black knots should not be left on site as research found that knots on cut branches released spores up to four months after being pruned off. Pruning tools should be sterilized between cuts with a 10 percent bleach solution or alcohol to avoid transmission of spores. Before purchasing cherry or plum trees for planting, inspect them for the presence of swelling or knots. Several fungicides are registered to control this disease, including lime sulfur and thiophanate-methyl. However, depending on timing, frequency and application technique, it may not provide a satisfactory result, and removal of infected materials should be the top priority for the control of this disease once black knots are detected.

Unused Firewood—A Ticking Tree Bomb

by Colleen B. Robinson Klug, Natural Resources Educator
DNR Division of Customer Assistance & Employee Services

Spring has arrived and this is a perfect time to remind home and cabin owners to burn all firewood by early April. This is an easy, important way to help protect trees.

Burning all of your firewood by April 1st will prevent pests and diseases in the firewood from emerging and attacking the trees on your property.

Stacks of firewood, quietly waiting to be used, may be harboring pests and diseases that lay dormant during cold weather. When temperatures begin to rise, these lurking threats "awaken" in the unused wood piles and set out to destroy live trees! Examples of notorious tree killers that move on firewood include the emerald ash borer and oak wilt, among others.

By making sure all firewood brought to the property is burned by early spring, home and cabin owners can easily protect the health of trees on their own property and neighboring acres. You can share this tip with others and do your part to reduce forest pest damage caused by unused winter firewood.

UF Grants Announced

Urban Forestry Grants Awarded to 59 Communities Throughout Wisconsin

MADISON—Fifty-nine Wisconsin communities and nonprofit organizations are receiving grants totaling almost $614,000 for community urban forestry projects ranging from developing tree plans to urban forest maintenance to staff training and public education. Six communities received the maximum grant possible of $25,000.

"Urban forests are important to the quality of life for people who live in cities," said Paul DeLong, administrator of the Department of Natural Resources Division of Forestry. "Eighty percent of Wisconsin's population lives in communities where forests exist in the form of parks, greenways, schoolyards and backyards. These grants provide funding to help local communities preserve and manage their green spaces that improve the quality of life for all who live there."

The Urban Forestry Grant program was established by the legislature in 1993. Grants can range from $1000 to $25,000. Applicants must match each grant dollar for dollar, though the match does not have to be cash. The match can consist of in-kind contributions of labor and equipment as well as project donations such as work done by volunteers. Applicants can be a city, village, town, county, tribal government or 501(c)(3) nonprofit organization. Information on applying for future grants is available on the Department of Natural Resources Web site, http://dnr.wi.gov/org/land/forestry/uf/grants/.

Urban Forestry Grant award recipients for 2007 are:

Amherst (Village)—$4500: street tree expansion program

Appleton (City)—$3931: urban forestry program

Ashland (City)—$15,250: urban forestry grant project

Ashwaubenon (Village)—$9455: geographic information system (GIS) tree inventory software

Baldwin (Village)—$24,692: urban forestry management, education & development plan

Bayfield (City)—$14,518: continuation of the Bayfield Urban Forestry Plan

Brown Deer (Village)—$10,955: North Shore Community emerald ash borer readiness plan

Butternut (Village)—$2537: Village of Butternut Arboretum

Cambria (Village)—$8164: tree inventory update & hazard tree evaluation

Clinton (Village)—$10,207: urban forestry project

Crossroads at Big Creek Environmental Center (nonprofit)—$14,316: master plan for the Crossroads at Big Creek Preserve

Dane County Tree Board (other)—$10,150: gypsy moth, EAB & oak wilt public education project

Drummond (Town)—$2858: urban forestry project

Dunn (Town)—$21,829: urban forestry plan & projects

Elm Grove (Village)—$1500: EAB readiness plan

Endeavor (Village)—$3588: urban forestry project

Fitchburg (City)—$25,000: urban forestry management plan

Friends of Troy Gardens (nonprofit)—$25,000: natural areas management initiative

Gays Mills (Village)—$7488: downtown revitalization

Germantown (Village)—$1865: EAB readiness plan

Gilman (Village)—$2425: urban forestry education

Glacierland RC&D, Inc. (nonprofit)—$19,519: EAB & Hwy. 57 interchange re-vegetation project

Grand Chute (Town)—$5155: Arbor Day celebration

Green Lake (City)—$8118—long-term urban forestry management plan

Greendale (Village)—$5604: street tree inventory

Greenville (Town)—$8113: management plan development, education & equipment purchase

Janesville Shade Tree Advisory Committee (nonprofit)—$2001: EAB inventory & development of information booth

Keep Greater Milwaukee Beautiful (nonprofit)—$23,283: Meet Your Neighbor: The Tree Project

Little Chute (Village)—$8285: street & park inventory and management plan

Madison (City)—$25,000—EAB response plan and staff training

Manitowoc County—$5067: Silver Lake Park Arboretum design & development

Menomonie (City)—$9124: GIS/GPS tree inventory & assessment database

Mosinee (Town)—$4068: replant oak wilt sites

New Holstein (City)—$7397: street tree viewing area

New Richmond (City)—$5270: urban forestry management plan

Onalaska (City)—$4051: EAB management program

Owen (City)—$4800: tree inventory

Paddock Lake (Village)—$3945: tree inventory & public information program

Port Washington (City)—$5230: urban forestry plan, education, staff training & tree planting

Pound (Village)—$9625: Hwy. 141 bypass replanting

Prentice (Village)—$6316: five-year urban forestry plan

Sauk City (Village)—$5237: street tree inventory

Sharon (Village)—$20,302: strategic urban forestry plan

Sheboygan Falls (City)—$2500: management plan, hazard tree identification & estimate the impact of EAB

Shorewood (Village)—$17,406: tree inventory upgrade

Shorewood Hills (Village)—$3800—EAB readiness plan, education & management plan

Stevens Point (City)—$25,000: upgrading personnel & operational capabilities

Sun Prairie (City)—$18,348: inventory and park tree planting

Trees for Portage, Inc. (nonprofit)—$3125: urban forestry educational initiative

Trees for Viola, Inc. (nonprofit)—$15,202: Trees for Viola

Urban Open Space Foundation (nonprofit)—$25,000: Phase II of the Urban Forestry Enhancement Initiative for North Avenue Neighborhood Schools, Milwaukee

Verona Public Library (other)—$1000: proper tree care & selection workshops

Viroqua (City)—$5268: urban forestry program

Washburn (City)—$25,000: implementation of Washburn urban forestry initiative

Wausau (City)—$20,394: ash tree survey, tree ordinance development and tree planting

Wautoma (City)—$5335: urban forestry grant project

Weston (Village)—$2465: gypsy moth/EAB public education & awareness

Whitewater (City)—$17,561: Urban Forestry Management: From ABC to GIS

Whiting (Village)—$10,220: Whiting well-field oak wilt restoration

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Project Profile:

Pruning 101 for Municipal Employees—Training Small Trees for Structure and Form

by Chris Clark, Forester
Village of Howard

During a recent Northeast Wisconsin Urban Forestry Working Group networking meeting, several small communities discussed staff training challenges and how to possibly combine efforts to train staff at a central location.

We decided that small-tree pruning would be the most beneficial training topic for staff at this time. Many employees who actually perform the maintenance pruning on municipal street trees have little training because this is typically not their primary job. The individuals assigned to perform tree pruning in these smaller communities are often street or parks department employees.

The training program, ***Pruning 101 for Municipal Employees—Training Small Trees for Structure and Form***, was held January 16–17, 2007. There were two one-day training sessions for attendees to choose from so as not to interfere with daily municipal operations. A total of 43 participants attended from 10 different communities in northeast Wisconsin.

The Village of Howard provided the training facility and street pruning locations while the Village of Allouez took care of registration, snacks and lunch. Participants were charged a small fee for their meal. Mike Maederer, owner of ***A Four Season Tree Care*** and Aaron Schauer, owner of ***Trees 4 Life***, both ISA certified arborists, volunteered their time to instruct the training program.

Photo by Chris Clark, Village of Howard

Mike Maederer and Aaron Schauer demonstrate structural pruning on a young street tree.

The training began with an overview of tree biology. Mike and Aaron went over what happens to trees when a branch is cut off, CODIT, callus tissue development, pruning methods and general rules of thumb. The participants also received informational handouts on tree pruning. The instructors stressed that street tree clearance standards and safety issues are typically different than those for lawn trees. Throughout the training, participants were encouraged to ask questions of Mike and Aaron.

The attendees also viewed the International Society of Arboriculture video "Training Young Trees for Structure and Form." This 38-minute video went through the five steps for training young trees, reasons to train young trees, and how much and when to prune.

Following the indoor session, the group went outside to do some hands-on training pruning of street trees. They went through the pruning steps on several 5"-diameter street trees which had received little previous pruning. Mike and Aaron answered questions from the group about how and why they pruned specific branches, what to do in the future, and how the tree is affected.

The training program was a huge success. Responses from the participants were very encouraging and positive. They seemed to connect with both Mike and Aaron, professional arborists who perform this work on a daily basis. The attendance was high and included multiple individuals from many different communities. This is most likely attributable to the municipal contacts to whom the registration forms were sent, the timing of the training and the low cost. A big thanks to all those involved! Because of them, there are 43 better educated tree workers in northeast Wisconsin pruning our communities' young trees. There has already been much interest in putting together another training session. Some suggestions have included: chain saw safety and operations, basic tree climbing and ground operations, including chipper safety.

Wisconsin's 2nd Tour des Trees Rides through the State

by Dick Rideout
Urban Forestry Program Coordinator
DNR Division of Forestry

The TREE Fund's Tour des Trees is an annual seven-day, 500+-mile cycling event that raises money to support research on trees and their care, and to promote the importance of our urban and community forests. It is the world's largest fundraising event to improve the care of urban trees through research and education. Since its inception, the Tour des Trees has grossed nearly $3 million.

Celebrating its 15th year, the 2006 Tour des Trees went from Thunder Bay, Ontario, to Minneapolis, Minnesota, from July 23rd to the 30th, spending 2½ days in Wisconsin—from Superior to Bayfield to Hayward—before heading back to Minnesota and on to the Twin Cities. The only other time the Tour des Trees was in Wisconsin was in 2001 when it traveled from St. Paul to Milwaukee.

This was my fourth tour, a nice combination of old friends and new acquaintances. We had 62 riders from every corner of the continent—from Florida to British Columbia and Southern California to eastern Ontario—men and women, age 25 to 73. Wisconsin fielded three other riders besides myself, Jeannette Bowden of Stevens Point, Doug Drysdale of Wauwatosa and Joe Hoffman of Wisconsin Rapids.

Each rider has to raise a minimum of $3500 to be allowed to ride. When all was done, the 2006 tour raised nearly $300,000 for urban tree research and education. But raising funds is only part of the tour. Raising awareness is the other big effort and this is where our partners came in.

It may sound like a lot of work riding 90+ miles a day for six days, especially this year where temperatures pushed or exceeded 100°F each day—and it is. But behind the scenes there is even more work going on, supporting the riders with lodging, food, fluid and repairs, and promoting the cause through tree plantings and media events. And let's not forget the hundreds of people, businesses and groups that sponsored riders to raise the needed funds.

City of Superior Parks & Forestry Director Mary Morgan (l) flanked by Mayor Dave Ross, welcome the riders and TREE Fund supporters to Superior.

Four Wisconsin events stand out. On the morning of day 3, we crossed the Bong bridge into Superior and were picked up by a police escort which took us to our first break at Superior's Millennium Trail, which winds through their 4500-acre municipal forest, the third largest in the country. We were met by Mayor Dave Ross, Parks and Forestry Administrator Mary Morgan, tree board member Dick Welch, who also serves on the Wisconsin Urban Forestry Council, and other city council and tree board members. Food and drinks were provided by local grocer Super 1 Foods and a radio reporter was there recording the event and interviewing riders and dignitaries. Superior knows how to do it right! Much later that afternoon, Bayfield welcomed the tour with a banner, and riders were treated to a dinner and show at the Big Top Chautauqua, where the tour was announced to the crowd and recorded later for broadcast.

Photo by John Gall, Wachtel Tree Science & Service

Three-fourths of the Tour des Trees Team Wisconsin. (l to r) Dick Rideout, Jeannette Bowden and Joe Hoffman.

Phot o by Alvin Gilens ©

Wisconsin rider Doug Drysdale arrives to a warm welcome at the city of Superior's Millennium Trail.

After leaving Bayfield on day 4, the first break was at the Northern Great Lakes Visitor Center. Tour rider Tim Womick, the Tree Guy, gave a performance to assembled school kids and the riders planted a tree at the center. The whole event—refreshments and all—was coordinated with help from DNR urban forestry partner, the Sigurd Olson Environmental Institute. That evening in Hayward, we got another treat. State nursery superintendent Gordie Christians and his staff put on a fantastic cookout at the nursery so the riders could experience Wisconsin brats, burgers and all the fixings. Gordie then provided folks with a tour of the nursery. The food and drink was sponsored by the owners and employees of First Choice Tree Care, Stevens Point. Thanks to all!

It will be a long time before the Tour des Trees is in Wisconsin again, but that doesn't mean you can't help support urban tree research and education. This year's tour is in California. Think about riding or supporting a rider and be part of the next great Tour des Trees! For more information visit **www.treefund.org/tourdestrees/**.

The Idea Exchange…

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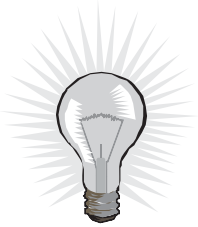


Does your community or organization have an idea, project or information that may be beneficial to others? Please let your regional urban forestry coordinator know. We will print as many of these as we can. If you see ideas you like here, give the contact person a call. They may be able to help you in your urban forestry efforts.

compiled by Olivia Witthun
DNR Northeast Region

Ash Tree Woodworking Competition

Can woodworkers find value in "junk" wood? Riverside Arts Center Gallery and Southeast Michigan Resource Conservation and Development Council are sponsoring a woodworking competition and exhibit. For a $10 entry fee, craftsmen use locally salvaged ash and other trees to make functional and decorative pieces. Projects may include furniture, turnings, carvings, sculptures, toys, musical instruments, kitchenware, pyrography and any other woodwork. Entries will be on exhibit throughout March and into April at the Riverside Arts Center Gallery in Ypsilanti, Michigan. Prizes will be awarded for first, second and third place. Info: www.riversidearts.org/woodshow.htm.

Reforestation Donation

Arbor Day 2006 was a time of giving for Beloit, Wisconsin. The city's public works department and school district partnered together to help raise funds to reforest Slidell, Louisiana. In August of 2005, Hurricane Katrina devastated the city of Slidell and its urban forest. Donations collected by Beloit will help reforest John Slidell Park. Each tree planted will have a plaque recognizing the Beloit community for helping revitalize Slidell's urban forest. As part of Beloit's Arbor Day ceremony, the city planted a tree in remembrance of Slidell. *Info:* www.wnrmag.com/supps/2006/aug06/hope.htm.

Abili-Trees

The Abili-Trees event is part of a rehabilitation program designed to help children with disabilities meet their treatment goals. The event gives disabled children the opportunity to experience tree climbing in a safe environment together with their families and medical professionals. By using specialized tree climbing equipment, children with all levels of disability are able to climb. The staff helping with the climb have all received certification as tree climbing facilitators, specialized training with rope systems used to aid people with limited abilities and most have a medical background. *Info:* www.med.umich.edu/opm/newspage/2003/treeclimbing.htm.

The Million Acorn Campaign

Great River Greening is leading the effort to restore oak savannas and forests throughout the Twin Cities region with the Million Acorn Campaign. Before development, oak savannas covered almost 2 million acres in the region. Now that number is less than 4000. Greening ecologists will work with public and private landowners to identify potential sites for restoration. Over the next five years, volunteers of all ages will take part in the removal of invasive species, prescribed burning, taking inventories and planting ground-layer vegetation and, of course, acorns! *Info:* www.greatrivergreening.org.

Research Notes:

The Potential Economic Impacts of Emerald Ash Borer (*Agrilus planipennis*) on Ohio, U.S., Communities

by T. Davis Sydnor[1], Matthew Bumgardner[2] and Andrew Todd[3]

A survey of 200 communities with individuals such as urban foresters was conducted to provide baseline data on ash density within Ohio communities. Sixty-seven communities responded, including the five largest cities in Ohio.

Losses in landscape value for ash trees within community boundaries were estimated to be between $0.8 and $3.4 billion, assuming the complete loss of ash resulting from the emerald ash borer. Tree removal costs would be somewhat smaller and range between $0.7 and $2.9 billion, based on reported median and mean costs. Tree replacement costs in Ohio communities, including streets, parks and private properties, would range between $0.3 and $1.3 billion.

In aggregate the total losses for Ohio communities, including ash landscape losses, tree removal and replacements, are estimated to range between $1.8 and $7.6 billion for a single insect pest in a single state. The potential total costs in Ohio are estimated to be between $157,000 and $665,000 per 1000 residents. Communities can use these figures to begin developing contingency plans.

[1] *The Ohio State University, Columbus, OH*

[2] *USDA Forest Service, Delaware, OH*

[3] *Ohio Department of Natural Resources, Division of Forestry, Columbus, OH*

Reference: *Arboriculture & Urban Forestry,* Vol.33, No.16, Pages 48–54. January 2007.

Urban Forestry Resources:

Nursery Stock

compiled by Cindy Casey
Urban Forestry Coordinator.DNR West Central Region

Take advantage of these on-line resources to help you find and order nursery stock for your planting project.

Wisconsin Nursery Association's Wholesale Source Book—www.wgif.net/pdfs/2006-07SourceBook.pdf

A handy way to narrow your search for specific plants! Grouped by plant type, the source book is a list of which WNA member nurseries carry which species and cultivars, and in what form (container, bare root, B&B, etc.).

American Standard for Nursery Stock, ANSI Z60.1—www.anla.org/applications/Documents/Docs/ANLAStandard2004.pdf

Published by the American Nursery and Landscape Association, this industry standard provides a common language for buyers and sellers of nursery stock. It is intended primarily for wholesale transactions and should be cited in bid specifications. The standard pertains to plant size description, measurement, and relationship between caliper, height and root volume. It does not address other aspects of plant health or quality.

Licensed Nursery Growers and Dealers in Wisconsin—www.datcp.state.wi.us/index.jsp

Nursery growers and dealers in Wisconsin must be licensed annually by the Department of Agriculture, Trade and Consumer Protection. Other states have similar licensing requirements. Bid specs should specify use of stock from licensed nurseries/dealers. Licensed nurseries are subject to inspection, primarily to guard against introduction of harmful plant pests. Current licensing status of growers and dealers can be checked on the DATCP Web site. At the home page, click on "Licenses, Permits, Certification" on the Quick Links menu. For the list of licensed ***dealers***, scroll to and click on "Nursery Dealer License." Then scroll to "Additional Information" and click on Wisconsin Licensed Nursery Dealers. Find the list of licensed ***growers*** the same way, beginning at the Licenses, Permits, Certification page.

Pruning Oaks

continued from page 8

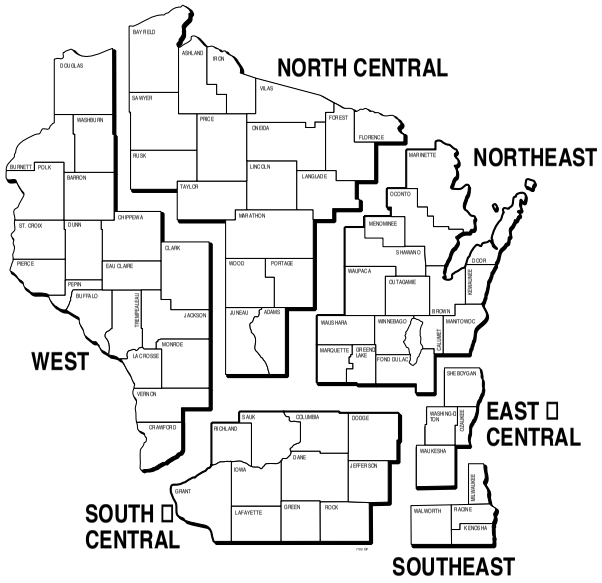
Don't prune or wound oak trees April through July, or to October to take a cautious approach. In some years, spring comes much earlier than we expect. If daytime temperatures begin to reach the 50F-degree mark, stop pruning oak, even if it's still the middle of March. Some municipalities have their own oak pruning guidelines. For more information about oak wilt biology and management, please visit the DNR Forestry Web pages at http://dnr.wi.gov/org/land/forestry/fh/oakwilt/.

What Damaged This Tree?

Photo by Mark Drow, Arborist

After six years of growth, a concerned arborist removed the straps placed on this sugar maple at planting time. Left in place, guying materials compress the stem as the tree grows. If uncorrected, this "girding" injury interrupts vascular flow, causing the tree to gradually decline and die. Stem compression and decay from girdling can also result in structural failure at the compression site, especially during strong winds.

Wisconsin DNR Urban and Community Forestry Contacts



World Wide Web Site: http://dnr.wi.gov/org/land/forestry/uf/

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